



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,068	07/14/2006	James William Griffith Turner	BWT-74734	3262
24201	7590	12/19/2007		
FULWIDER PATTON LLP HOWARD HUGHES CENTER 6060 CENTER DRIVE, TENTH FLOOR LOS ANGELES, CA 90045			EXAMINER TRIEU, THAI BA	
			ART UNIT 3748	PAPER NUMBER
			MAIL DATE 12/19/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/586,068

Applicant(s)

TURNER, JAMES WILLIAM
GRIFFITH

Examiner

Thai-Ba Trieu

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-30 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Species of Figure 1 has a first exhaust duct connected to a turbine of a single turbocharger and a second exhaust duct connected to a catalytic converter.

Species of Figure 2 has a first exhaust duct to deliver exhaust gas to a high-pressure turbine of a high-pressure turbocharger; a second exhaust duct to deliver exhaust gas from second exhaust valves of the engine; the exhaust gas from the second exhaust duct combining with the exhaust gas out of the high-pressure turbine being delivered into a low-pressure turbine of a low-pressure turbocharger; a bypass passage bypassing a high-pressure compressor; and the compressed air in the bypass passage being controlled by a bypass valve.

Species of Figure 3 has a first exhaust duct connected to a low-pressure turbine of a low-pressure turbocharger, and a second exhaust duct connected to exhaust passage; a bypass passage bypassing a high-pressure supercharger; and the compressed air in the bypass passage being controlled by a simple mechanical pre-loaded bypass valve.

Species of Figure 4 has a low-pressure electric ally driven compressor, a bypass passage bypassing the low-pressure compressor; a first exhaust duct

connected to a high-pressure turbine of a high-pressure turbocharger, and a second exhaust duct connected to the exhaust passage.

Species of Figure 5 has a first exhaust duct to deliver exhaust gas to a high-pressure turbine of a high pressure turbocharger, and a second exhaust duct to deliver exhaust gas from second exhaust valves of the engine; the exhaust gas from the second exhaust duct combining with the exhaust gas out of the high-pressure turbine being delivered into a low-pressure turbine of a low-pressure turbocharger; the exhaust gas being delivered into the low-pressure turbine being controlled by a starting valve; a bypass passage bypassing a high-pressure compressor; and the compressed air in the bypass passage being controlled by a bypass valve.

Species of Figure 6 has a first exhaust duct to deliver exhaust gas to a high-pressure turbine of a high-pressure turbocharger, and a second exhaust duct to deliver exhaust gas from second exhaust valves of the engine; the exhaust gas from the second exhaust duct combining with the exhaust gas out of the high-pressure turbine being delivered into a low-pressure turbine of a low pressure turbocharger; the exhaust gas being delivered into the low-pressure turbine being controlled by a starting valve; a bypass passage bypassing a high-pressure compressor; the compressed air in the bypass passage being controlled by a bypass valve, valves "c" being controlled during engine braking to allow compressed gases to flow from the cylinder to a storage tank.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

1. Claims 1-4 and 13-16 directed to a turbocharged internal combustion engine with two turbochargers being in series; which are read on Species of Figure 2, Figure 5 and Figure 6.
2. Claims 5-6 and 12, and 17-20 directed to a turbocharged internal combustion engine with a low pressure turbocharger and one engine driven high pressure supercharger being arranged downstream of a compressor of the low pressure turbocharger, which are read on Figures 3, Figure 5, and Figure 6 .
3. Claims 7 and 21-25 directed to a turbocharged internal combustion engine with a high pressure turbocharger and an electrically driven compressor

being arranged upstream of a compressor of the high pressure turbocharger; which are read on Species of Figure 4, Figure 5 and Figure 6.

4. Claims 8-11 and 26-30 directed to control of a turbocharged internal combustion engine having two turbochargers, which are read on Species of Figure 2, Figure 5, and Figure 6.

The following claim(s) are generic: None

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

Each of the disclosed species has a patentably distinct feature from one another and a unique special structure specified for its intended purpose

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of

record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (571) 272-4867. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Application/Control Number:
10/586,068
Art Unit: 3748

Page 7

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TTB
November 26, 2007



Thai-Ba Trieu
Primary Examiner
Art Unit 3748